

BI-WEEKLY REPORT 3

FEB 22, 2021 - MARCH 1, 2021

SDMAY21-37

115/34.5KV SOLAR POWER PLANT & SUBSTATION DESIGN

CLIENT: BLACK & VEATCH

FACULTY ADVISOR: DR. VENAKATARAMANA AJJARAPU

GROUP MEMBERS:

CHRISTOF BARRIER

LOGAN HINKLE

KEVE HUGHES

BRIAN LEMKE

CORTLAND POLFLIET

NOLAN ROGERS

ERIC SCHULTZ

SUMMARY

Not much was accomplished for this reporting period, as it was only a one-week period and we did not have an opportunity to meet with our mentors. We progressed with our bus plan diagram by changing certain spacings and adding additional measurements. We plan on having much more done for the next reporting period.

ACCOMPLISHMENTS

- Trench Fill Tool – Nolan, Brian, Logan, Keve, Christof, and Cortland
 - Not much progress done, awaiting information
- One-Line Diagram – Eric, Christof, Brian, and Cortland
 - Progress is paused, will revisit later to implement relaying
- Bus Plan Diagram – Eric, Christof, and Nolan
 - Added various measurements and estimated spacing. Will properly adjust for next meeting.

Group Member	Bi-Weekly Hours	Cumulative Hours
Christof	5	27
Logan	2	22
Keve	2	22
Brian	3	25
Cortland	2	22
Nolan	4	26
Eric	6	32

PENDING ISSUES

- Trench Fill Tool –
 - Awaiting cut sheets for various components from Black & Veatch to continue building the tool.
 - Need to work on formatting and appearance.
- Bus Plan Diagram –
 - Need to properly adjust for spacing and sizing of all components.

PLANS FOR UPCOMING WEEKS

- Trench Fill Tool –
 - Continue to work on tool once we receive required information from mentors.
- One-Line Diagram –
 - Figure out how to model relaying and adjust spacing accordingly.
- Bus Plan Diagram –
 - Streamline dimensions and determine proper spacing for components and phase spacing.
- Overview Drawing –
 - Create initial attempt at overview diagram, combining first and second semesters.

SUMMARY OF MEETINGS

This week was relatively unproductive, with many aspects being put on hold until we meet with B&V. We need to work more on our bus plan diagram to determine spacing and sizing. We are still awaiting a few action items from Black & Veatch including component cut sheets and information on the trench fill tool. We plan to have much more completed for our next bi-weekly report on March 15th.